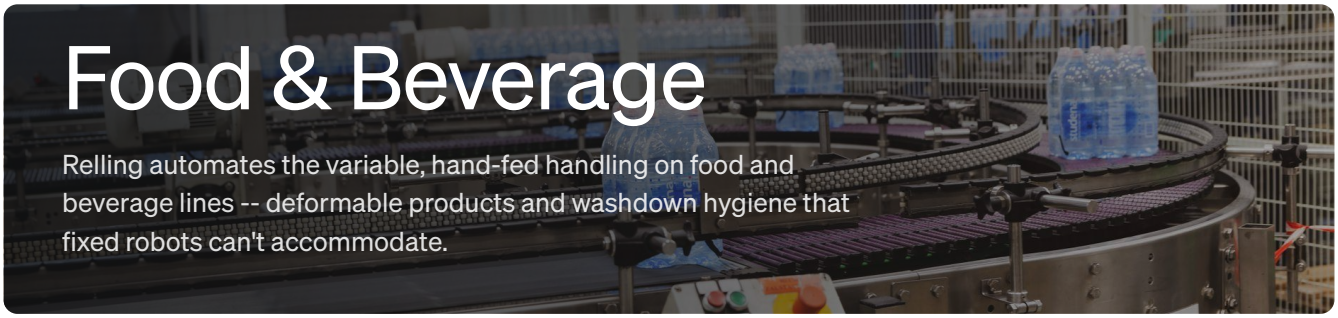
Food & Beverage



Relling automates the variable, hand-fed handling on food and beverage lines -- deformable products and washdown hygiene that fixed robots can't accommodate.

Food and beverage runs on variety and a clock. Natural products vary part to part, seasons shift the supply, and everything spoils. The resistant jobs -- packing soft product into trays, hand-feeding lines, sorting by feel in cold, wet rooms -- are repetitive, ergonomically brutal, and run at hours nobody wants. Turnover is constant, training never finishes, and changeover for the next SKU eats the shift.

Relling fits the work fixed automation can't justify. One cell learns a library of skills and reconfigures in software per product -- no rebuild for each pack size, recipe, or allergen run. It handles deformable, variable goods and tolerates washdown and cold. Every cell is qualified at Relling HQ against your tasks before it ships, then tuned to your line and your parts on-site, running in two weeks or less.

AT A GLANCE

Footprint	~2 × 2 m
Payload	12.5 kg
Reach	1.3 m
Placement	±0.05 mm
Power	Single-phase
Install	≤ 2 weeks

01 The work we take on

THE TASK PROFILE

A

Deformable product

Dough, fillets, produce, and baked goods deform under grip and vary in size and weight; the cell modulates force and adapts its hold per piece.

B

Washdown and hygiene

Lines run caustic, high-pressure sanitation cycles; handling must survive wet, food-safe environments without harboring contamination or degrading between washes.

C

Cold and wet rooms

Chilled and refrigerated zones make repetitive manual handling miserable and slow; the cell works the cold line without fatigue or break cycles.

D

Constant changeover

High SKU counts and frequent recipe, pack, and allergen changes force fast reconfiguration; the cell switches product in software, not retooling.

E

Variable natural input

Weight, shape, ripeness, and density shift piece to piece and by season; the cell senses each item and adjusts placement and portion accordingly.

02 Why now

THE CASE FOR MOVING NOW

Labor walks off cold lines

Cold, wet, repetitive food jobs see the highest churn on the floor. Recruiting and retraining for chilled rooms and night shifts is constant overhead, and unfilled seats throttle throughput on perishable product that cannot wait.

Traceability is now mandatory

FSMA 204 and retailer mandates push lot-level traceability, date coding, and allergen control deep into the line. Consistent, recorded handling and labeling turns audits and recalls from a scramble into a logged, defensible record.

High mix kills fixed lines

Private label, seasonal SKUs, and constant pack changes make hard-tooled lines uneconomical. Software reconfiguration per product absorbs changeover without retooling, keeping a single cell productive across a catalog that keeps growing.

OEMS WE WORK WITH

BECKHOFF · Rockwell Automation · SIEMENS · FANUC · KUKA · ABB · YASKAWA

03 What we automate in food & beverage

TASKS ON THE LINE

A — Tray loading
Place soft or irregular product into trays, clamshells, and cartons at line rate.

B — Portioning
Weigh and divide bulk product into target-weight portions, trimming giveaway.

C — Case packing
Pack bottles, pouches, and trays into cases and dividers without crushing.

D — Depalletizing
Break down incoming pallets of ingredients, cans, and packaging onto the line.

E — Palletizing
Stack finished cases into stable, labeled pallets ready for cold storage.

F — Date and label
Apply date codes, lot labels, and allergen tags with traceable accuracy.

G — Foreign-object check
Inspect product and fill levels, rejecting contaminants and underfilled units.

H — Pick and place
Sort and transfer deformable, variably shaped product between belts and stations.

WHAT A CELL HOLDS

≤ 2 wk	±0.05 mm	100%
Install to running on your floor, not months of integration	In-hand placement for fit- and safety-critical parts	Inspection on every part — checked, not sampled

Representative configuration. Final specs are issued with the proposal.

04 Working with us

FROM YOUR PART TO A QUALIFIED CELL, IN ~TWO WEEKS ON-SITE

A · SCOPE & PO

We start with your part

We work from your part, volumes, takt, and the line you'd deploy on. A short scoping engagement confirms fit, defines acceptance criteria, and puts a fixed scope and price in writing — capital purchase and robotics-as-a-service, side by side.

B · PRE-BUILD AT RELLING HQ

We build & qualify it first

We build the cell on our own production floor and run it against your parts until it meets the acceptance criteria. The trial-and-error happens here, not on your line — so what ships is already proven.

C · ON-SITE CONFIGURATION

It arrives pre-built

The qualified cell shows up ready. On-site work is tuning, not assembly: under two weeks to integrate with your line, MES/ERP, and safety, followed by a supervised run on real product.

D · ACCEPTANCE & FIRST UNIT

Proven, then handed over

We run supervised until your safety engineer signs off and the cell hits its numbers. Your technicians operate it day to day; maintenance and software updates are covered.

05 Let's talk

We started Relling to help this country make more of what it needs. If you have a task that's hard to staff or hard to automate, send it over — we'll tell you straight whether a cell fits, and scope it if it does.

Talk to us: jai.relan@rellingsystems.com · rellingsystems.com

EXCEPTIONAL ENGINEERING, TEAM FROM

SPACEX · NASA · BOEING · TESLA · RIVIAN · ANYSIGNAL · coinbase